

Appl. No. 10/516,639
Amdt. Dated Jan. 12, 2006
Reply to Office Action of Dec. 2, 2005

REMARKS

Claims 1, 2, and 4-19 are currently pending. In the Office Action dated Dec. 2, 2005, Claims 1, 2, 4-11, 18, and 19 were rejected; Claims 12 – 17 were objected to as being dependent upon a rejected base claim but allowable matter noted. In response thereto, Claim 5 and 12 has been cancelled and Claims 1 and 11 have been amended. No new matter is added.

Applicant wishes to thank the Office the thorough office action and acknowledgment of allowable subject matter. The arguments and amendments herein should place all remaining claims in condition for allowance.

Claims Rejections - 35 USC §112 Second Paragraph

The Office rejected Claims 1, 2 and 4 – 10 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

As previously noted, in a §112 second paragraph rejection based on indefiniteness, the "essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. *Definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.*" (MPEP §2173.02). [emphasis added]

The focus during examination for compliance the requirement for definiteness of 112 (second paragraph) is whether the claim meets the threshold requirements of clarity and precision, and not whether more suitable language or modes of expression are available. Furthermore, there is a presumption that the claims describe the applicant's invention, absent evidence to the contrary.

Appl. No. 10/516,639
Amdt. Dated Jan. 12, 2006
Reply to Office Action of Dec. 2, 2005

A rejection stating that the claims fail to set forth the subject matter that the applicant regards as the invention is only appropriate where the applicant has stated that the invention is something different from what is defined by the claims (MPEP §2172(a)).

The Office states that the recitation of "four of at least four" is vague and indefinite since "at least four" includes "four". In more particular detail, a portion of claim 1 is recited below:

[Claim 1 in-part] ... at least four single conductors connecting the first transformer with the second transformer, said at least four single conductors conducting electric power and communication signals, wherein four of said at least four single conductors are arranged in pairs and conduct electric power...

There are at least four single conductors connecting the first transformer to the second transformer. These 'at least four' single conductors conduct electric and communications. For example, there can be eight single conductors. Of these 'at least four single conductors', four of them are arranged in pairs and conduct electric power. Thus in the example herein, with eight single conductors, four of them are arranged in pairs and conduct power.

The specification provides embodiments for paired single conductors and a three-phase plus one configuration. However it is also noted that one of the features of this invention is that it avoids certain known problems wherein if a conductor in the cable was damaged, the system would fail to function. With respect to having additional conductors in the undersea cable, these additional cables can be used for redundancy, other functions, or for expansion capabilities.

A commonly assigned application, Norwegian Patent Application No. 20020781 ('781) (see also related PCT Application WO01/16515) incorporated by reference in the present application describes the importance of the 'umbilical' that provides the power and communications to an offshore location. In the '781 patent, there are multiple conductors for power and multiple conductors for controls signals. Obviously, running an undersea cable is an expensive and time-consuming event, and the cable should have sufficient capacity for expanded

Appl. No. 10/516,639
Amdt. Dated Jan. 12, 2006
Reply to Office Action of Dec. 2, 2005

operations as opposed to running a completely new cable. The cable of the present invention can have a plurality of conductors – “at least four.”

As noted, “definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art. A proper application of this analysis clearly shows that the use of ‘four of at least four conductors’ provides sufficient clarity and precision.

While the application describes several embodiments showing four conductors for illustrative purposes, the original claims included reference to at least four conductors. As noted in MPEP 2163.06, “[t]he claims as filed in the original specification are part of the disclosure and therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the applicant may amend the specification to include the claimed subject matter. *In re Benno*, 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985).

Therefore, the Applicant has amended the specification to include the feature of having at least four conductors already recited in the claims. No new matter is added. For at least the reasons presented herein, the rejection is traversed.

Claims Rejections - 35 USC §102(b)

The Office has again rejected claims 1, 2, 4, 6, 9, and 10 under 35 U.S.C. 102(b) as being anticipated by Hassel (US 5,444,184). Applicant herein amends claims 1 and cancels claim 5. The statutory requirements for anticipation have already been recited.

The Office alleges that Hassel teaches an integrated power and communications system with transformers and conductors as set forth by the present claims. However, as already recited, Hassel describes a twisted pair solution to the transfer of signals power and communications signals and the present invention teaches away from the Hassel reference by using single

Appl. No. 10/516,639
Amdt. Dated Jan. 12, 2006
Reply to Office Action of Dec. 2, 2005

conductor elements and not twisted pairs. While the Applicant disagrees with the allegations of the Office and does not acquiesce to the basis for this further rejection, Applicant has amended claim 1 to include certain features of claim 5 in relation to the filters described in the present application. The Office has acknowledged allowable subject matter for claims 5, 7, and 8. Therefore, this rejection is traversed and all claims dependent therefrom are deemed allowable.

The Office has also again rejected claims 11, 18, and 19 under 35 U.S.C. 102(b) as being anticipated by Galipeau (US 6,249,913). Applicant herein amends claims 11 and cancels claim 12.

The Office alleges that Galipeau teaches an integrated power and communications system with transformers and conductors as set forth by the present claims. In actuality, Galipeau is a data management system for aircraft that has a number of power lines (Galipeau 42, 44, 46, 50, 58, 60) with a number of communications lines (Galipeau 24, 26, 28, 30) in a single cable. There are numerous distinctions and claimed elements that clearly traverse this rejection. However, while the Applicant rigorously disagrees with the allegations of the Office and does not acquiesce to the basis for this rejection, Applicant has amended claim 11 to include certain features of claim 12 with respect to the control unit recited in the present application. The Office has acknowledged allowable subject matter for claims 12 - 17. Therefore, this rejection is traversed and all claims dependent therefrom are deemed allowable.

For at least these reasons that Applicant submits that the present invention is distinguishable and traverses the anticipation rejection as neither Hassel nor Galipeau teach each and every element of the claims. Allowance of all claims is respectfully requested.

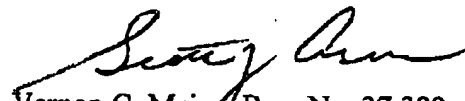
Telephone Interview

As this is a final rejection, Applicant would respectfully request a telephone interview if the Office does not grant an allowance of all claims.

Appl. No. 10/516,639
Amdt. Dated Jan. 12, 2006
Reply to Office Action of Dec. 2, 2005

Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,



Vernon C. Maine, Reg. No. 37,389
Scott J. Asmus, Reg. No. 42,269
Andrew P. Cernota, Reg. No. 52,711
Attorneys/Agents for Applicant

Cus. No. 24222
Maine & Asmus
PO Box 3445
Nashua, NH 03061-3445
Tel. No. (603) 886-6100
Fax. No. (603) 886-4796
patents@maineandasmus.com